RGB 580xi

Architectural Remote Interface with Audio Interfacing and ADSP™

FEATURES

- **Input: Video on female 15-pin HD connector; audio on 3.5 mm stereo jack**
- **Output: Video on female 5-BNC connector; audio on stereo captive screw connector**
- **Compatible with VGA-QXGA, Mac, Sun®, and SGI® signals**
- **300 MHz (-3 dB) RGB video bandwidth**
- **Unique design allows out-of-sight mounting**
- **Optional RGB 580xi AAP Series architectural adapter plates provide remote access to connectors and controls**
- **Various cable lengths and connector configurations available on AAPs**
- **ADSP™ - Advanced Digital Sync Processing**
- **Automatic sync stripping from red, green, and blue**
- **Active PC audio to balanced audio interfacing**
- **Horizontal shift control**
- **RS-232 control**
- **Internal international power supply**

RGB 580xi SI AAP

DESCRIPTION

The Extron **RGB 580xi** is a universal, computer-video interface designed to give users discreet, remote access to interface connections and controls. The RGB 580xi provides high-performance computer-video interfacing features for use in applications where the interface needs to be located out of sight. There are two components to the RGB 580xi: a double space AAP - Architectural Adapter Plate and an interface enclosure designed to mount under a surface. Users connect computer video and audio to the interface through a female 15-pin HD connector on the small, inconspicuous AAP. The computer-video signal is then transmitted to the RGB 580xi interface enclosure over connecting cables and output to a display device on five female BNC connectors.

The RGB 580xi is compatible with VGA-QXGA, Mac, Sun®, SGI®, and other computer-video signals. It has a horizontal frequency range of 15-150 kHz and 300 MHz (-3 dB) RGB video bandwidth. It outputs RGBHV, RGBS, and RGsB on five female BNCs. The RGB 580xi features Extron's exclusive ADSP™ - Advanced Digital Sync Processing, which provides all-digital sync processing so stable images are produced on digital display devices, such as DLP, LCD, D-ILA™/LCoS, plasma, etc. Audio interfacing converts computer-generated, unbalanced audio to line level balanced audio.

There are five different configurations of remote panels available for the RGB 580xi AAPs, giving system designers the flexibility to select which controls are needed for specific installations. These are:

RGB 580xi AAP: female 15-pin HD input, 3.5 mm stereo mini jack, and a two-color LED to indicate power and signal present.

RGB 580xi S AAP: female 15-pin HD connector, 3.5 mm stereo mini jack, two-color LED, and horizontal shift control.

RGB 580xi SI AAP: female 15-pin HD connector, 3.5 mm stereo mini jack, two-color LED, input select contact closure button, and horizontal shift control.

RGB 580xi CCS AAP: Control panel and signal input pull-out cables for mounting in an Extron Cable Cubby® enclosure. 9-foot or 12-foot cable assembly, two-space AAP panel with two-color LED, and horizontal shift control.

RGB 580xi CCSI AAP: Control panel and signal input pull-out cables for mounting in an Extron Cable Cubby enclosure. 9-foot or 12-foot cable assembly, two-space AAP panel with two-color LED, horizontal shift control, and input select contact closure button.

The controls and connections from the AAP inputs are extended to the interface enclosure through cable assemblies. Each AAP version can be purchased with cable assemblies that are three or six feet in length, except for the RGB 580xi CC AAP, which comes with a 9-foot or 12-foot cable assembly. Each AAP is also available in black, white, and RAL9010 white.

MODEL	VERSION DESCRIPTION		PART #
RGB 580xi	Mountable Remote Interface with Audio		60-362-01
INCLUDED ACCESSORIES	**MODEL DESCRIPTION**	**PAGE**	**PART #**
MBU 125	1U, 1/2 & 1/4 Rack Width, Under-Desk Mount Kit for Two-Piece Enclosure	page 743	70-077-01

Continued →

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Extron®

RGB 580xi

SPECIFICATIONS

VIDEO

Gain ..... 0.35 V to 1.45 Vp-p
Bandwidth ..... 300 MHz (-3 dB)

VIDEO INPUT

Number / Signal type ..... 1 analog RGBHV, RGBS, RGsB, RsGsBs
Connectors ..... 1 female 15-pin HD
Nominal level ..... 0.7 Vp-p for RGB
Minimum / Maximum levels ... Analog: 0.3 V to 1.45 Vp-p with no offset
Impedance ..... 75 ohms or high Z, switchable (set to 75 ohms if no local monitor is connected)
Horizontal frequency ..... Autoscan 15 kHz to 150 kHz
Vertical frequency ..... Autoscan 40 Hz to 140 Hz
Return loss ..... <-30 dB @ 5 MHz
DC offset (max. allowable) ..... 2.0 V

VIDEO OUTPUT

Number / Signal type ..... 1 analog RGBHV, RGBS, RGsB
Connectors ..... 5 BNC female
Nominal level ..... 0.7 Vp-p for RGB
Minimum / Maximum levels ... 0.35 V to 1.45 Vp-p
Impedance ..... 75 ohms
Return loss ..... -30 dB @ 5 MHz
DC offset ..... ±5 mV maximum with input at 0 offset

SYNC

Input type ..... RGBHV, RGBS, RGsB, RsGsBs
Output type ..... RGBHV, RGBS, RGsB
Input level ..... 2 V to 5.5 Vp-p with ±0.2 VDC offset max.
Output level ..... TTL: 4 V to 5 Vp-p, unterminated
Input impedance ..... 510k ohms
Output impedance ..... 75 ohms
Max. propagation delay ..... 85 ns
Max. Rise / Fall time ..... 2 ns
Polarity ..... RGBHV: Polarity follows input when RGBHV is input and the sync polarity switch is set to Off. Sync polarity is negative if the sync polarity switch is set to On.
RGBS, RGsB: negative

AUDIO

Gain ..... Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response ..... 20 Hz to 20 kHz, ±0.05 dB
THD + Noise ..... 0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N ..... >90 dB at maximum output, balanced (unweighted)
Stereo channel separation .... >90 dB @ 1 kHz to 20 kHz

AUDIO INPUT

Number / Signal type ..... 1 PC level stereo, unbalanced
Connectors ..... (1) 3.5 mm stereo mini audio jack (female) (tip, ring, sleeve)
Impedance ..... >10k ohms, unbalanced, DC coupled
Nominal level ..... -10 dBV (316 mV)
Maximum level ..... +8.5 dBu, (balanced or unbalanced) at 1% THD+N

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

AUDIO OUTPUT

Number / Signal type ..... 1 buffered stereo (2 channel), balanced/unbalanced
Connectors ..... (1) 3.5 mm, captive screw connector, 5 pole
Impedance ..... 50 ohms unbalanced, 100 ohms balanced
Gain error ..... ±0.1 dB channel to channel
Maximum level (600 ohm) ..... > +14 dBm, balanced or unbalanced at 1% THD+N

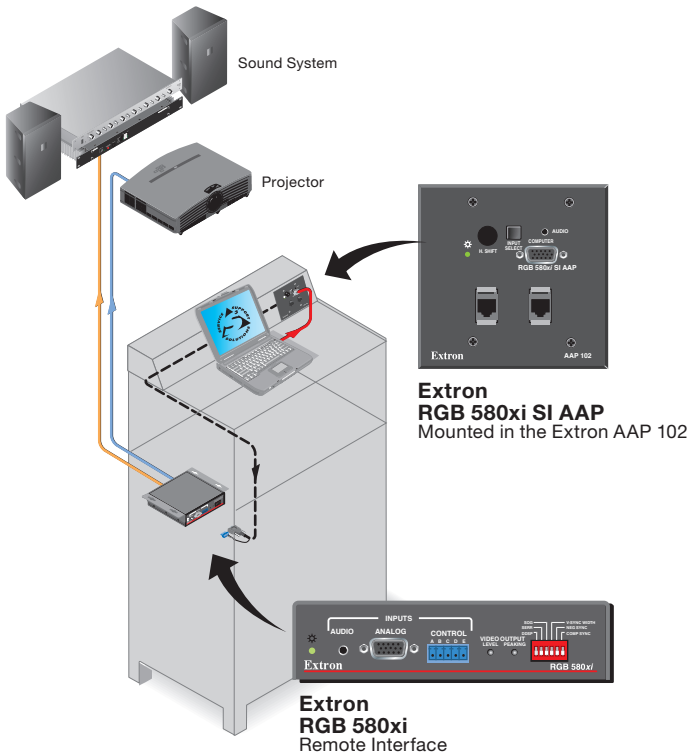
CONTROL / REMOTE – INTERFACE

Serial control port ..... RS-232, captive screw connector, 3 pole
Baud rate and protocol ..... 9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration ..... 1 = TX, 2 = RX, 3 = GND
Program control ..... Extron's control/configuration program for Windows®
Extron's Simple Instruction Set (SIS™)

GENERAL

Power ..... 100VAC to 240VAC, 50/60 Hz, 18 watts, internal, autoswitchable
Temperature / Humidity ..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount ..... No, but furniture mountable with included under-desk mounting kit #70-077-01
Enclosure type ..... Metal (vented)
Enclosure dimensions ..... 1.75" H x 6.4" W x 6.0" D
4.4 cm H x 16.3 cm W x 15.2 cm D
(Depth excludes connectors.)
Product weight ..... 1.2 lbs (0.5 kg)
Shipping weight ..... 4 lbs (2 kg)
Vibration ..... ISTA 1A in carton (International Safe Transit Association)
Listings ..... UL, CUL
Compliances ..... CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF ..... 30,000 hours
Warranty ..... 3 years parts and labor

NOTE: All nominal levels are at ±10%. Specifications are subject to change without notice.



Extron
RGB 580xi SI AAP
Mounted in the Extron AAP 102

Extron
RGB 580xi
Remote Interface

Extron®

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